

# ED3541 Series

Hardened 10/100BASE-TX Ethernet Extender



## Overview

The ED3541 Ethernet extender allows the extension of IP services beyond normal Ethernet distance limitations without changing cables, breaking the 100-meter Ethernet barrier.

The ED3541's hardened design features high shock and vibration, electrical noise immunity, a wide operating temperature range from -40 to 75°C, and ruggedized aluminum housing. The ED3541 is the ideal Ethernet extender for environments where connectivity is crucial.

EtherWAN — "When Connectivity is Crucial."

## Highlights

### + High Speed Performance

Up to 100Mbps at 200 meters distance  
Up to 1Mbps at 2200 meters distance

### + For Use in Hazardous Locations

Class 1, Division 2 certified for use in hazardous locations

### + Wide Operating Temperature

Fanless and wide operating temperature range -  
40 to 75°C (-40 to 167°F)

# Specifications

## + Interface

### Ethernet Port

Port: One RJ-45 port  
 Speed: 10/100Mbps  
 Distance: 100 meters (328ft.)  
 Cable: 10BASE-T: UTP Cat. 3, 4, 5 (2-pair wire);  
 100BASE-TX: UTP Cat. 5 (4-pair wire)

### Ethernet Extender Port

Port: One RJ-11/Terminal Block port  
 Speed: Up to 100Mbps  
 Distance: 2200 meters (7,217ft.)  
 Cable: Telephone wire 24AWG (0.5mm diameter,  
 1-pair wire) or larger

### DIP Switch

DIP 1 Site: Auto/Loc  
 DIP 2 LDR: On/Off

### LED Indicators

Per Unit: Power 1, Power 2  
 Per 10/100TX Port: Link/Activity, full-duplex  
 Line Speed: 100/80/60/40/20Mbps and link below  
 20Mbps

Distance (m)	Data rate (Mbps)
200	100
400	80
600	60
800	40
...	...
2200	1

All speed selections are Symmetrical on the DSL and Full-duplex on the Ethernet.  
 The data rate will vary according to the line quality.

## + Technology

### Standards

IEEE 802.3 10BASE-T  
 IEEE 802.3u 100BASE-TX  
 IEEE 802.3x full duplex and flow control

### Processing Type

Half-duplex back-pressure and IEEE 802.3x full-duplex flow control  
 Auto-negotiation  
 Auto MDI/MDIX

## + Power

### Input

12-48VDC Redundant (Terminal Block)

Power Consumption  
4.56W max. 0.38A@12VDC, 0.07A@48VDC

Protection  
Over Current Protection  
Reverse Polarity Protection

## + Physical

**Casing Material**  
Aluminum

**Dimensions**  
42 x 90 x 100mm (W x D x H)  
1.65" x 3.54" x 3.94"

**Weight**  
0.41kg (0.9lbs)

**Installation Type**  
DIN-rail mounting (Top hat type 35mm)

## + Environmental

**Operating Temp.**  
-40 to 75°C (-40 to 167°F)

**Storage Temp.**  
-45 to 85°C (-49 to 185°F)

**Relative Humidity**  
5% to 95% (non-condensing)

## + Regulatory

**ISO**  
Manufactured in ISO-9001 facility

**EMI**  
FCC Part 15B Class A  
VCCI Class A  
EN 61000-6-4

**EMS**  
EN 61000-6-2  
EN 61000-4-2 (ESD)  
EN 61000-4-3 (Radiated RFI)  
EN 61000-4-4 (Burst)  
EN 61000-4-5 (Surge)  
EN 61000-4-6 (Induced RFI)  
EN 61000-4-8 (Magnetic field)

**Safety**  
UL 60950-1  
EN 60950-1  
IEC 60950-1  
ISA 12.12.01  
Class 1, Division 2 group A, B, C & D for hazardous locations

**Vibration**  
IEC 60068-2-6 Fc

**Shock**  
IEC 60068-2-27 Ea

**Free Fall**  
FED STD 101C Method 5007.1

## + Warranty

Length  
Limited Lifetime

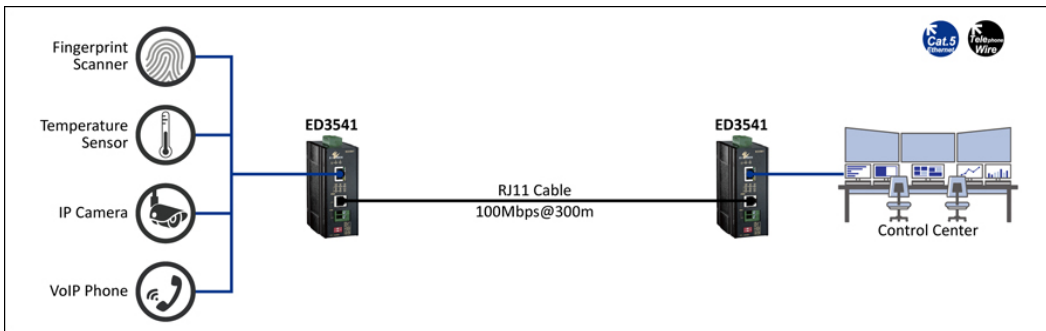
Details  
[www.etherwan.com/support/warranty-policy](http://www.etherwan.com/support/warranty-policy)

## + What's Included

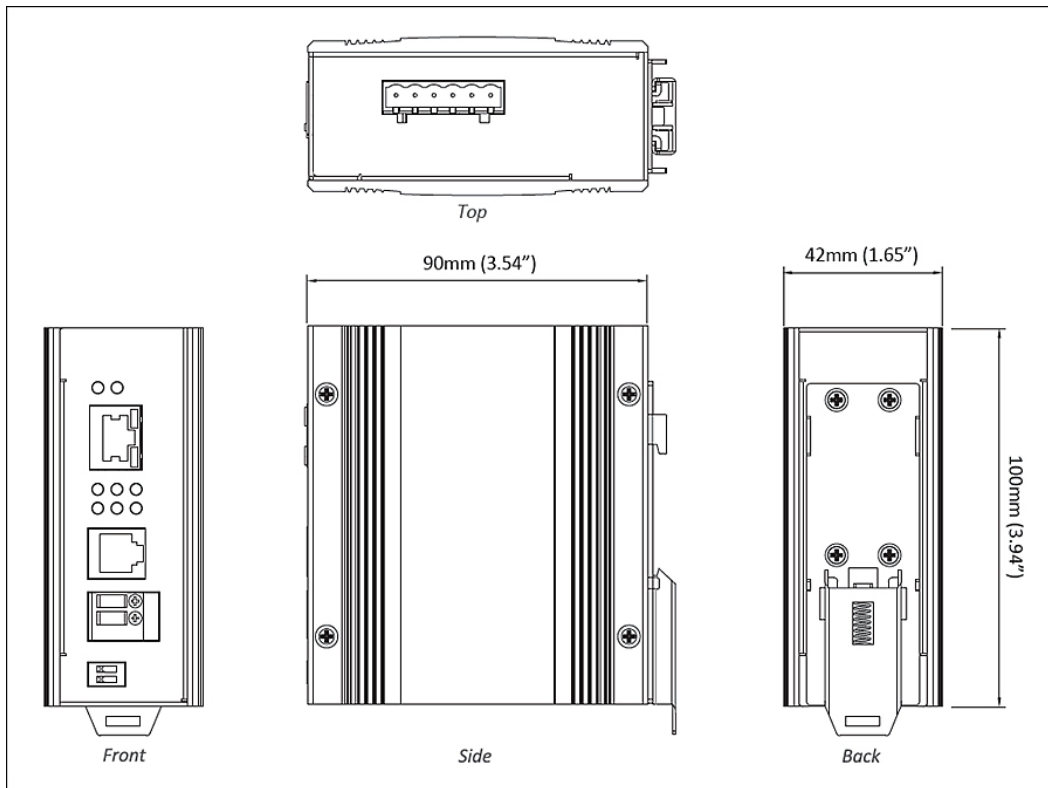
Device  
Ethernet Extender

Documentation  
Quick Install Guide

## Application



## Dimensions



## Ordering Info

### + Model

**ED3541** Hardened 10/100BASE-TX Ethernet Extender

\* DIN-Rail mounting kit included.

### + Optional Accessories

**HDR-30-24** 30W/1.5A DIN-Rail 24VDC Industrial Power Supply

### + Accessories

**DIN-Rail Power Supplies** [www.etherwan.com/products/din-rail-power-supply](http://www.etherwan.com/products/din-rail-power-supply)

